

REMARKS

Entry of the foregoing amendments, and reexamination and reconsideration of the subject application, pursuant to and consistent with 37 C.F.R. § 1.104 and § 1.112, and in light of the following remarks, are respectfully requested.

Amendments

As presented above, the claims have been amended to replace the previously inserted "suppressor" with "magnetic substance." Applicants nevertheless traverse the basis for the previous communication, that "a suppressor need not have the elected composition" because the claims specifically require the recited composition, even though also directed to a suppressor. Regardless, the present claims are believed to accord with the prior prosecution and the election of species.

The extraneous bracket in claim 4 has been corrected.

Objections and Rejections under 35 USC 112

The rejection of claims 2, 3, 5, 6, and 10-12 is believed obviated by the present amendments, namely the cancellation of claims 2 and 5 and the presentation of new claims 18 and 19 with certain bwr ranges shown in the examples.

Prior Art Rejection

All of the claims presently under examination stand rejected as anticipated by Han *et al.*, which rejection is respectfully traversed in light of the present amendments.

As recited in claim 1, these inventors have found that the M-X-Y composition recited has a maximum complex permeability in a frequency range of 0.1-10 GHz. Using various tests, these inventors decided and confirmed that such a material, for example, as a thin film (63 in Fig. 6), is useful for suppressing noise.

The reference does not describe or appreciate the claimed μ''_{\max} frequency range recited in the claims for this thin film noise suppression device. The range shown in Fig. 7 of the reference is 0-100 MHz, and the reference merely states the permeability value at 100 MHz, though the data clearly start to slope downward from 10 MHz to 100 MHz. These disclosures should be compared with the range of 100-10,000 MHz presently claimed and Fig. 4 (from Example 1) for μ''_{\max} , which occurs at frequencies above those tested in the reference. The reference does not appear to provide any data on complex permeability nor on the frequency range presently claimed.

Without appreciation for the claimed μ''_{\max} frequency range, the claimed thin film magnetic substance is not inherently anticipated, because the only similarities are the composition and fabrication by sputtering. The rejection fails to show that these two parameters will necessarily provide the same substance with the same properties, and so the claims are not inherently anticipated. In fact, the reference discloses that Fe-Al₂O₃ thin films do not show as good soft magnetic properties as the Fe-Si₃N₄ films in Fig. 7. Yet Applicants' Figs. 3 and 4 show Fe₇₂Al₁₁O₁₇ and Fe₄₄Al₂₂O₃₄ films with μ'' increasing with a maximum above 100 MHz. Thus, the compositions are not the same.

Neither would the claimed thin film have been obvious from the reference. Fig. 7 of the reference shows and describes a perceptible decrease in μ' , and no data on μ'' , so the claimed substance with a μ''_{\max} at higher frequencies would not have been obvious.

Accordingly, withdrawal of this rejection is now believed to be warranted.

Conclusion

In light of the foregoing amendments and remarks, withdrawal of all of the rejections, and further and favorable action, in the form of a Notice of Allowance, is believed to be next in order, and such actions are earnestly solicited.